

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-8-31  
Relating to Certification of New Motor Vehicles

BAYERISCHE MOTOREN WERKE AG

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1985 model-year Bayerische Motoren Werke AG exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
FBM2.7V5FAB7	164.3 (2.7)	Three-Way Catalyst with Closed Loop (Electronic Fuel Injection)

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The following are the certification emission standards for this engine family:

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0.41	7.0	0.7

The following are the certification emission values for the above engine family:

<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0.27	1.8	0.4

BE IT FURTHER RESOLVED: That the listed models were certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.15 of Title 13, California Administrative Code which includes repair or replacement of emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" (Title 13, California Administrative Code, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards as stipulated in "California Exhaust Emission Standards and Test Procedures for 1981 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036).

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this 13<sup>th</sup> day of November, 1984.



K. D. Drachand, Chief  
Mobile Source Division

Manufacturer BMW Executive Order No. A-8-31  
Engine Family FBM2.7V5FAB7 Evaporative Family EV 20  
Engine CID (Liters) (2.7) 164.3

## ABBREVIATIONS

Ignition System

CA-Centrifugal Advance  
EEC-Electronic Engine Control  
EI-Electronic Ignition  
ESAC-Electronic Spark Advance  
Control  
VA-Vacuum Advance  
VR-Vacuum Retard  
BMCU - Bosch Motronic Control Unit  
EID - Electronic Ignition Distributor

Exhaust Emissions Control System

AIP-Air Injection-Pump  
AIV-Air Injection-Valve  
CL-Closed Loop  
EGR-Exhaust Gas Recirculation  
EM-Engine Modification  
OC-Oxidation Catalyst System  
TR-Thermal Reactor  
TWC-Three Way Catalyst System

Soecial Features

CCV-Combustion  
Chamber Valve  
CFI-Central Fuel  
Injection  
DID-Diesel  
Injection-  
Direct  
DIP-Diesel  
Injection-  
Prechamber  
  
MFI-Mechanical  
Fuel Injection  
TC-Turbocharged

Fuel System

CFI, CL, DID, DIP, EFI, MFI  
nV-nVenturi Carburetor  
VV-Variable Venturi  
FI - Fuel Injectors  
BMCU - Bosch Motronic Control Unit  
AFM - Air Flow Meter

DRIVE SYSTEM: Front engine, rear wheel drive

ISSUE DATE: 1/24/84	REV. DATE				SATISFACTORY	UNSATISFACTORY
					DATE	NAME



# AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

☒ Passenger Cars ☐ Light-Duty Trucks ☐ Medium-Duty Vehicles ☒ Gas ☐ Diesel

Manufacturer BMW

E.O. # A-8-31

Engine Family FBM2.7V5FAB7

CID (liter) - Type <sup>1643</sup>(2.7)1 - inline six cyl.

ECS (Special Features) TWC, CL

Engine Code	Vehicle Models (If Coded see attachment)	Trans.	Ign. System Part No.	Fuel System Part No.	EGR Valve Part No.	Label Ident. Part No.
2.7 M5	BMW 528e	M5 —	BMCU	EFI	n.a.	2 121 505
			0 261 200 007	BMCU		1 874 981
			EID	0 261 200 007		
2.7 A4			1 235 522 365	AFM		
		A4 —		0 280 202 066		
				FI		
				0 280 150 126		

Comments: See page 17-23 for abbreviations and evaporative emission family identification.

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